

LISTING OF CLAIMS

1-29 (canceled)

30. (new) A speech synthesis apparatus for performing a text-to-speech synthesis to generate synthesized speech, comprising:

a text analysis unit for performing linguistic analysis of input text as a processing target and acquiring language information therefrom and providing speech output to a prosody control unit;

a first database for storing intonation patterns of actual speech;

a prosody control unit for receiving speech output from the text analysis unit and for generating a prosody comprising determining pitch, length and intensity of a sound for each phoneme comprising said speech and a rhythm of speech with positions of pauses for audibly outputting the text and providing the prosody to a speech generation unit; and

a speech generation unit for receiving the prosody from the prosody control unit and for generating synthesized speech based on the prosody generated by the prosody control unit,

wherein the prosody control unit includes:

an outline estimation section for estimating an outline of an intonation for each assumed accent phrase configuring the text based on language information acquired by the text analysis unit, wherein

the outline estimation section defines the outline of the intonation at least by a maximum value of a frequency level in a segment of the assumed accent phrase and relative level offsets in a starting end and termination end of the segment;

a shape element selection section for selecting an intonation pattern from the database based on the outline of the intonation, the outline having been estimated by the outline estimation section and wherein the shape element selection section selects an intonation pattern approximate in shape to the outline of the information, the outline having been estimated by the outline intonation section, among the intonation patterns of the actual speech, the intonation patterns having been accumulated in the database; and

a shape element connection section for connecting the intonation pattern for each assumed accent phrase to the intonation pattern for another assumed accent phrase, each intonation pattern having been selected by the shape element selection section, to generate an intonation pattern of an entire body of the text, wherein the shape element connection section connects the intonation pattern for each assumed accent phrase to the other, the intonation pattern having been selected by the shape element selection section, after adjusting a frequency level of the assumed accent phrase based on the outline of the intonation, the outline having been estimated by the outline estimation section.

31. (new) The speech synthesis apparatus of Claim 30 further comprising a second database which stores information concerning intonations of a speech recorded in advance, wherein, when the assumed accent phrase is present in a recorded phrase registered in the second database, the outline estimation section acquires information concerning an intonation of a portion corresponding to the assumed accent phrase of the recorded phrase from the second database and estimates an outline of an intonation for the assumed accent phrase based on an estimation result of an outline of an intonation for the other assumed accent phrase corresponding to the phrase of the recorded speech.